

TIP PROJECT: B-4124

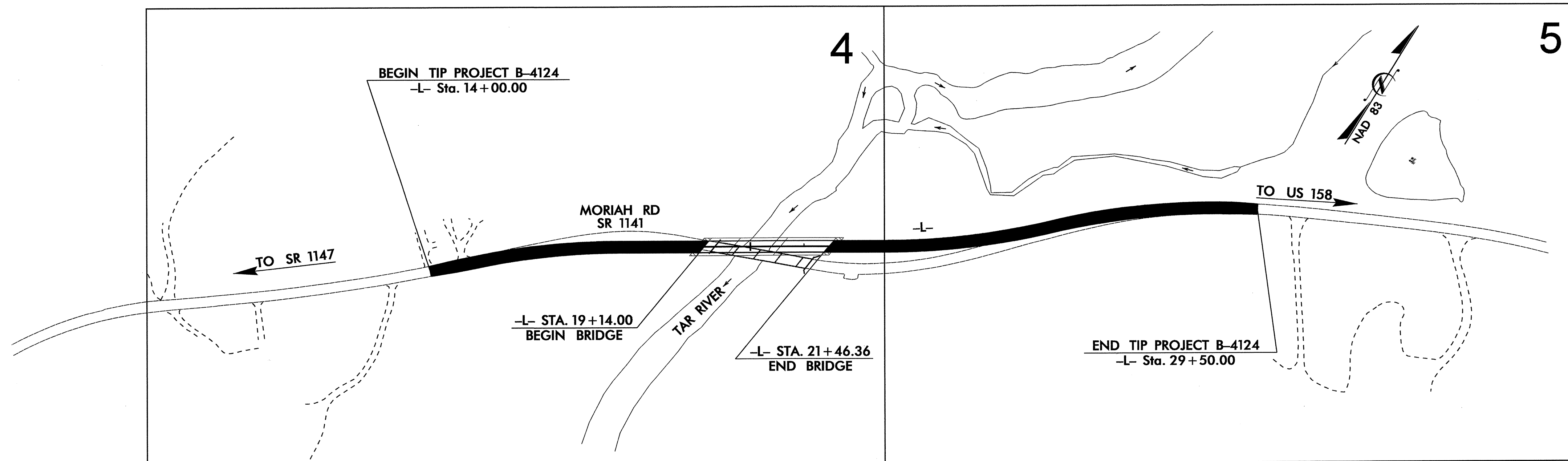
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

GRANVILLE COUNTY

LOCATION: BRIDGE NO. 84 ON SR 1141 OVER TAR RIVER

TYPE OF WORK: GRADING, DRAINAGE, PAVING, & STRUCTURE



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4124	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
	Streambank Reforestation	
1630.03	Temporary Silt Ditch	
1630.05	Temporary Diversion	
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.01	Riser Basin	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-B	
1634.01	Temporary Rock Sediment Dam Type-A	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	
1630.04	Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	
1632.02	Type B	
1632.03	Type C	
	Skimmer Basin	
	Tiered Skimmer Basin	

**THIS PROJECT CONTAINS
EROSION CONTROL PLANS
FOR CLEARING AND
GRUBBING PHASE OF
CONSTRUCTION.**

**THIS PROJECT HAS
BEEN DESIGNED TO
SENSITIVE WATERSHED
STANDARDS.**

**ENVIRONMENTALLY
SENSITIVE AREA(S) EXIST
ON THIS PROJECT**
*Refer To E. C. Special Provisions
for Special Considerations.*

GRAPHIC SCALE

0

PLANS

0

PROFILE (HORIZONTAL)

0

PROFILE (VERTICAL)

ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

Prepared In the Office of:
ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611

2006 STANDARD SPECIFICATIONS

Roadway Standard Drawings

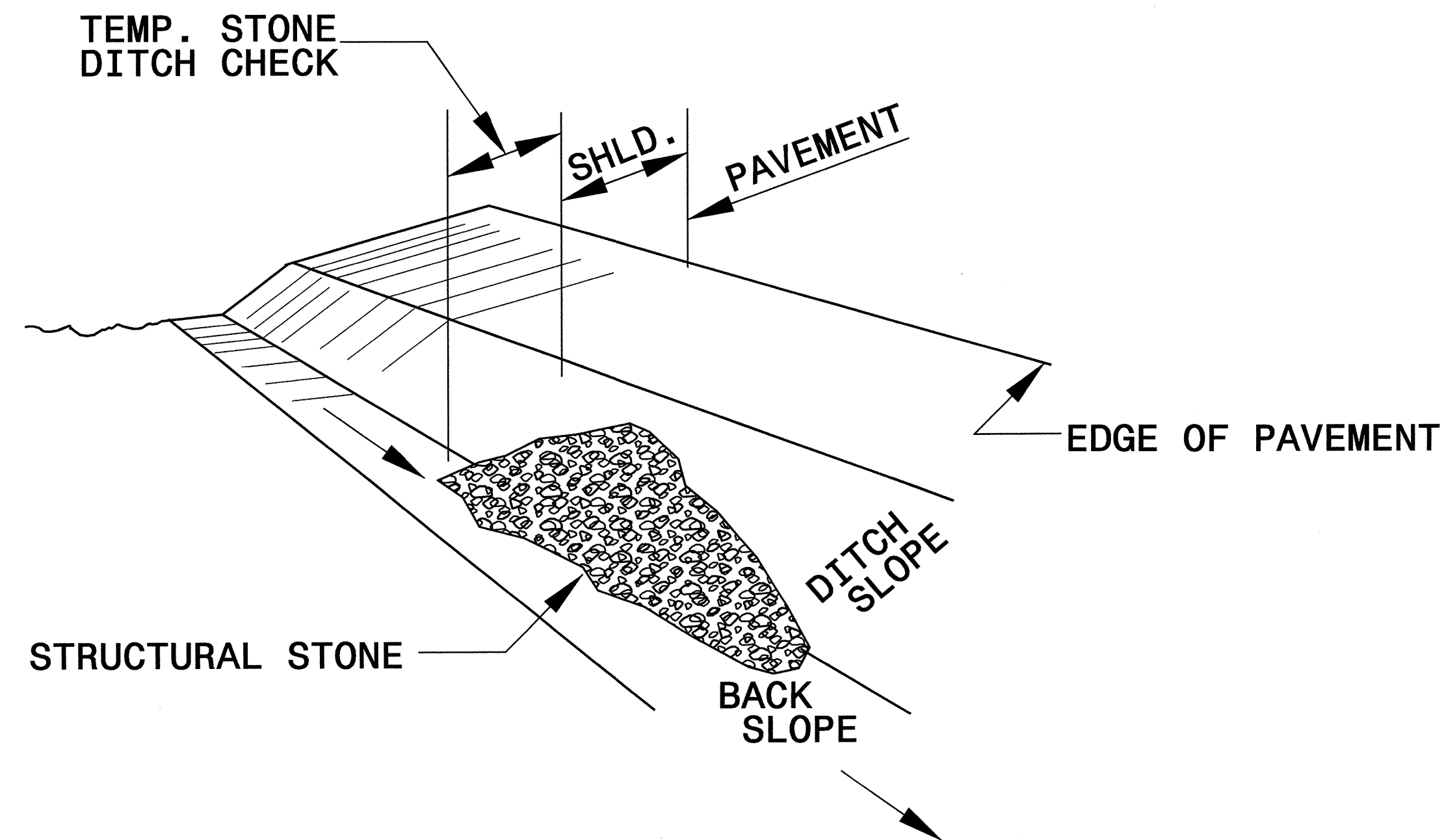
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence	1630.06 Special Stilling Basin
1606.01 Special Sediment Control Fence	1632.03 Rock Inlet Sediment Trap Type C
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type A
1622.01 Temporary Berms and Slope Drains	1634.02 Temporary Rock Sediment Dam Type B
1630.03 Temporary Silt Ditch	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.05 Temporary Diversion	

12-OCT-2007 12:15
I:\projects\B-4124\env\detail\B-4124-r-ecj-tsh.dgn

PROJECT REFERENCE NO. B-4124	SHEET NO. EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

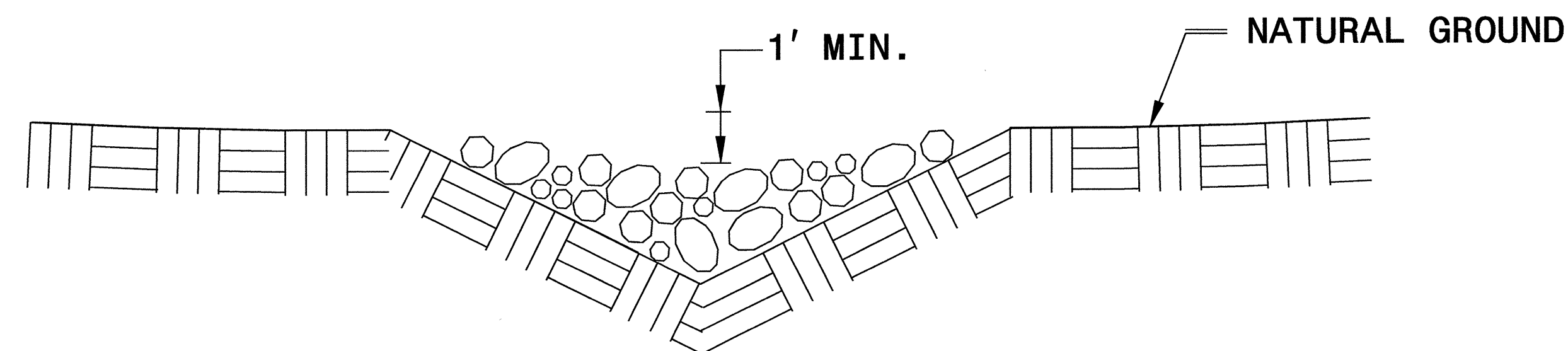


ISOMETRIC VIEW

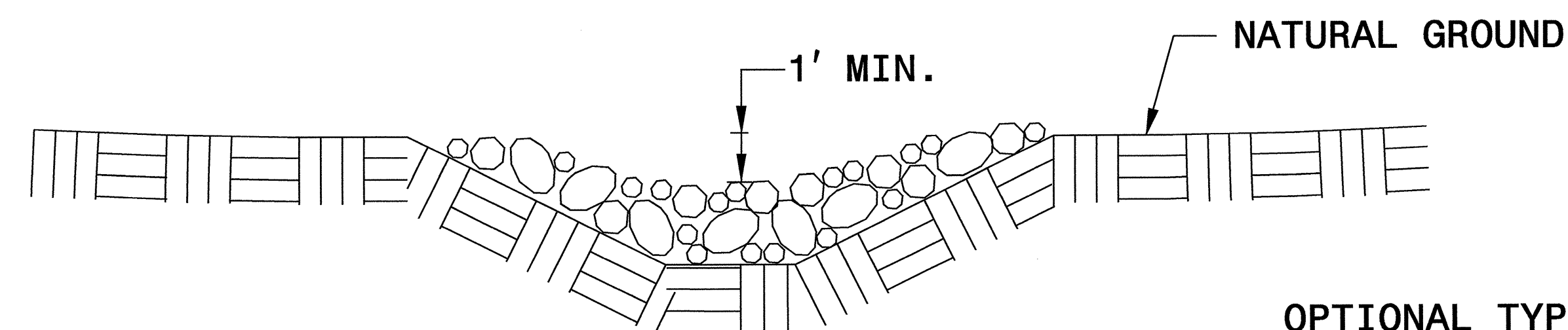
NOTES:

USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

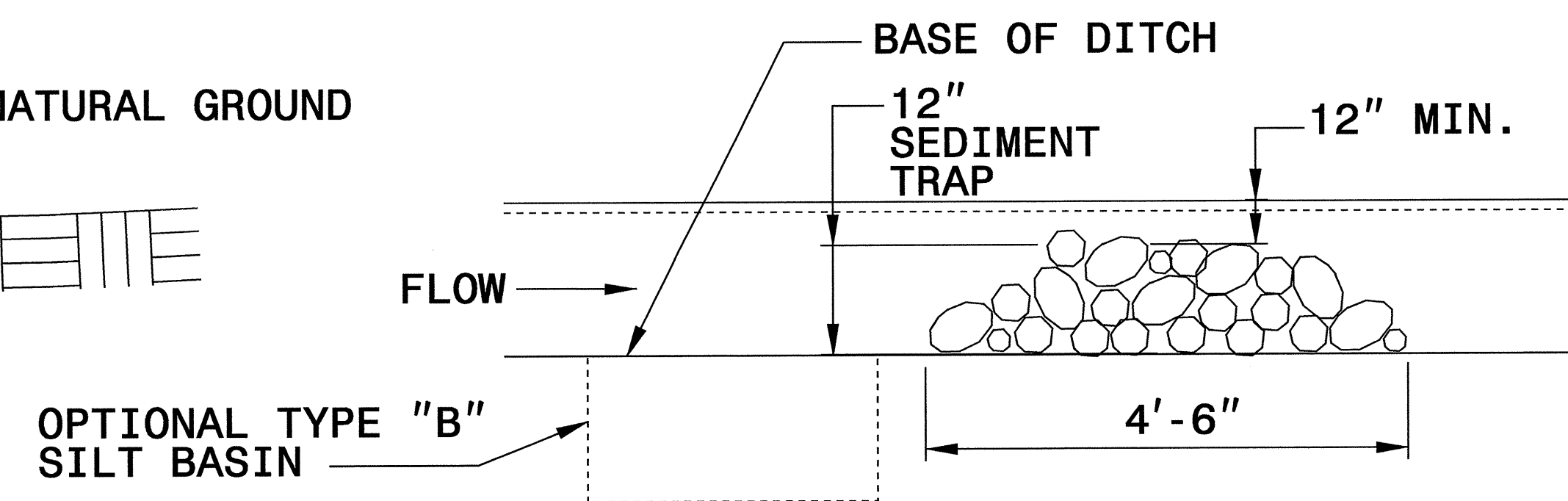
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



**CROSS SECTION
VEE DITCH**



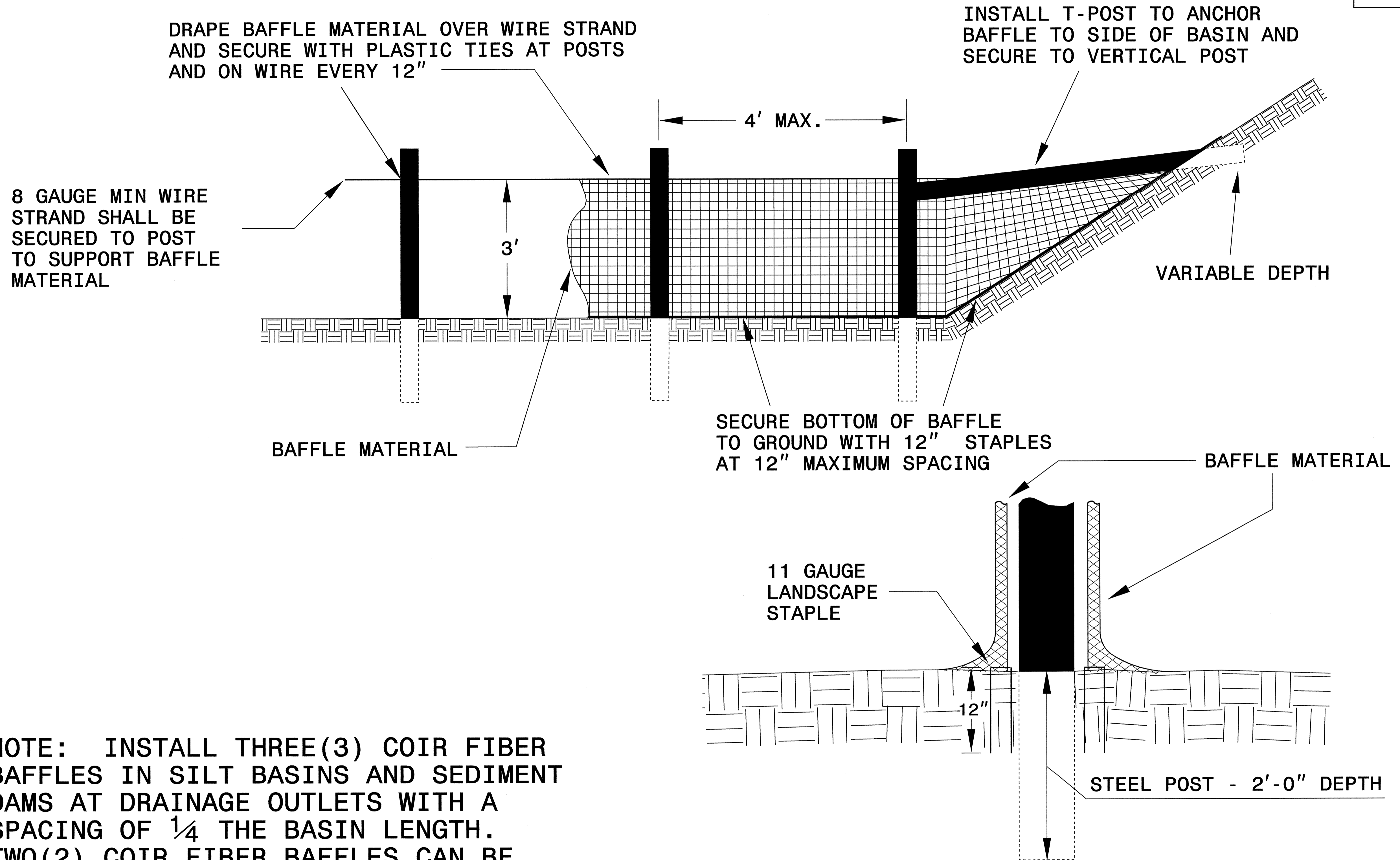
**CROSS SECTION
TRAPEZOIDAL DITCH**



ELEVATION VIEW

PROJECT REFERENCE NO. B-4124	SHEET NO. EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL

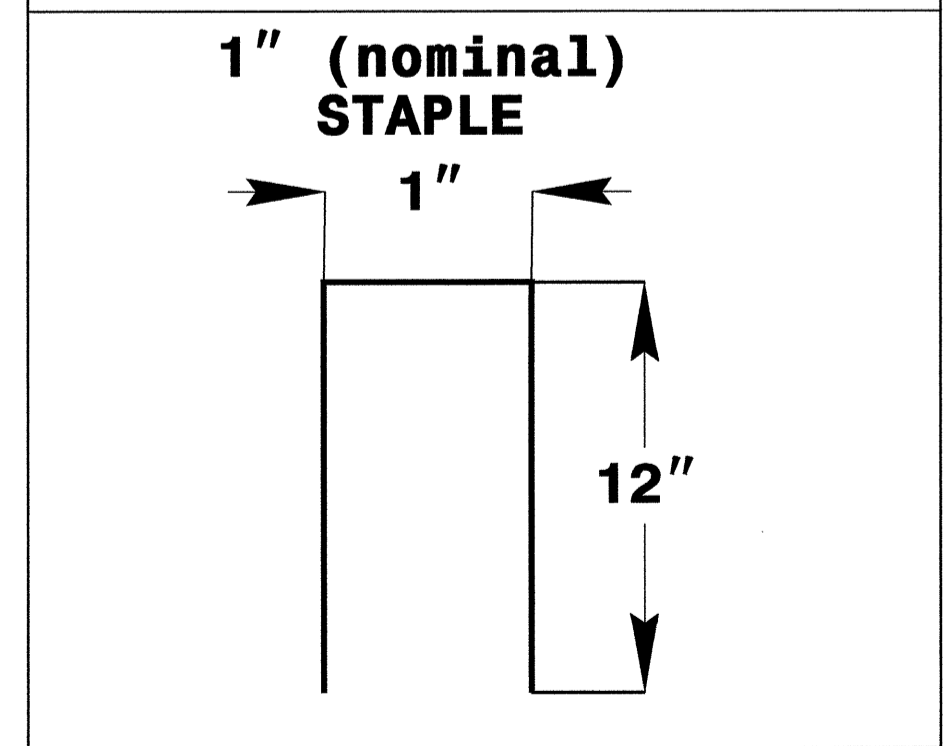
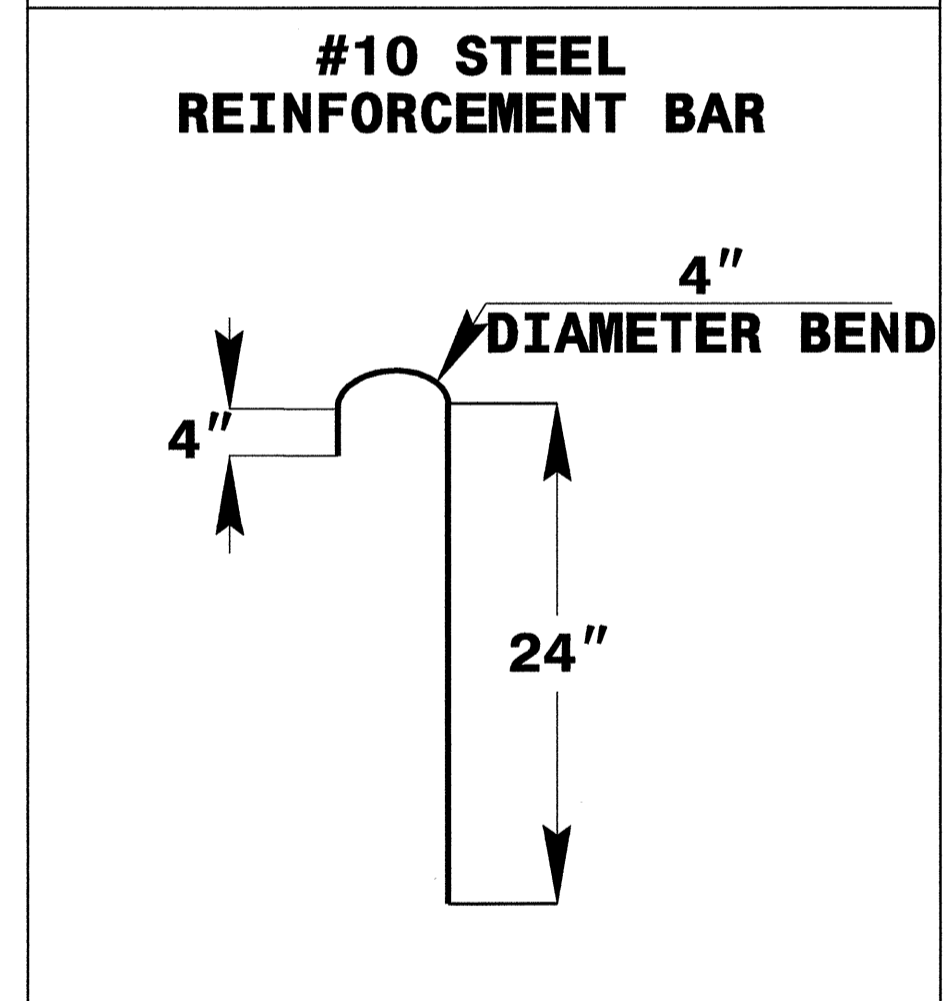
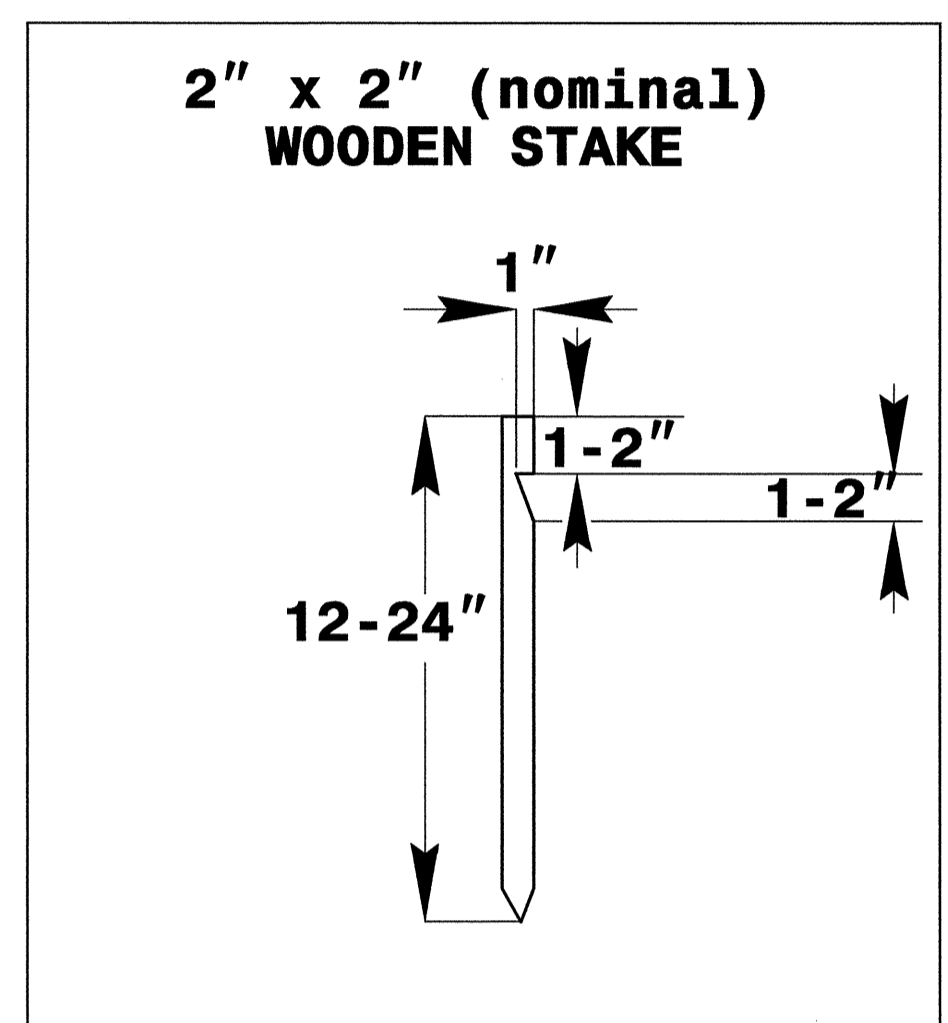
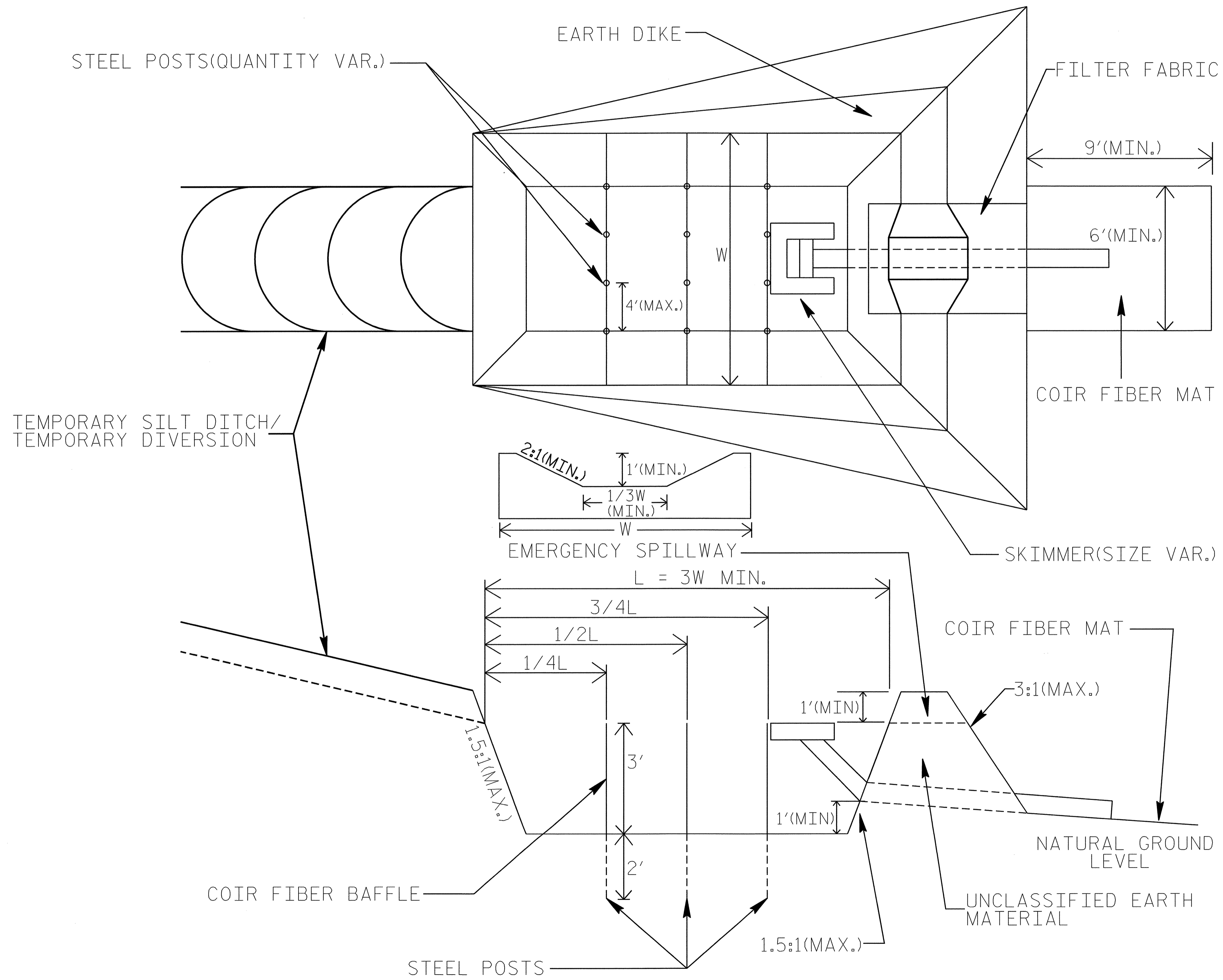


NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF $\frac{1}{4}$ THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF $\frac{1}{3}$ THE BASIN LENGTH.

BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12" LANDSCAPE STAPLES

SKIMMER BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. B-4124	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



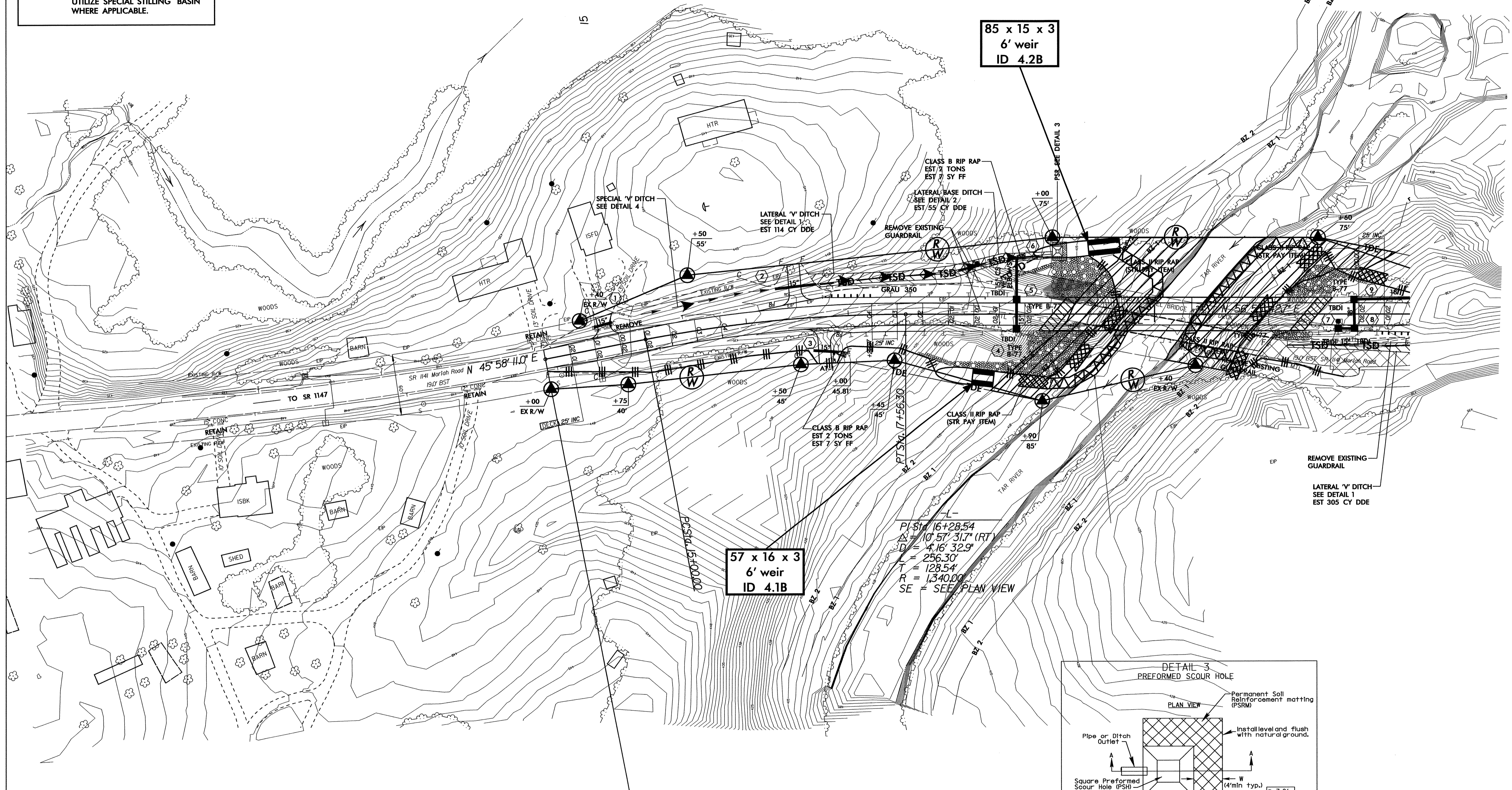
COIR FIBER MAT ANCHOR OPTIONS

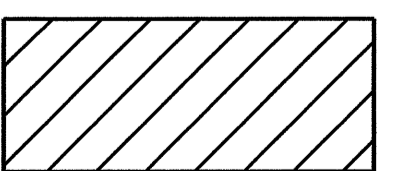
PROJECT REFERENCE	SHEET NO.
B-4124	EC-4/CONST.4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

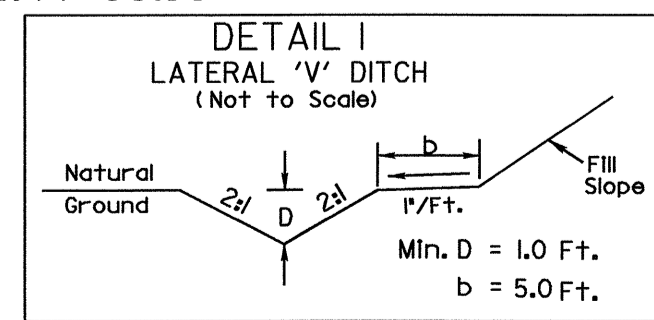
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

NOTE:
UTILIZE SPECIAL STILLING BASIN
WHERE APPLICABLE.

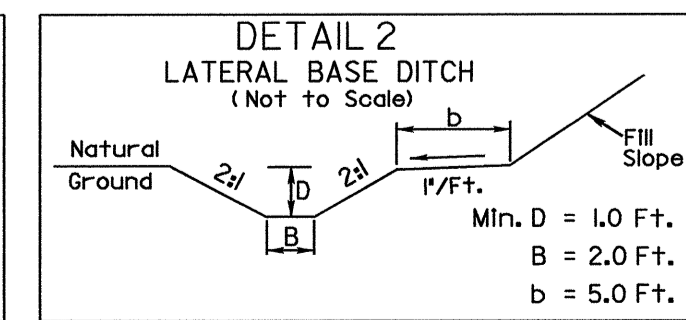


 ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

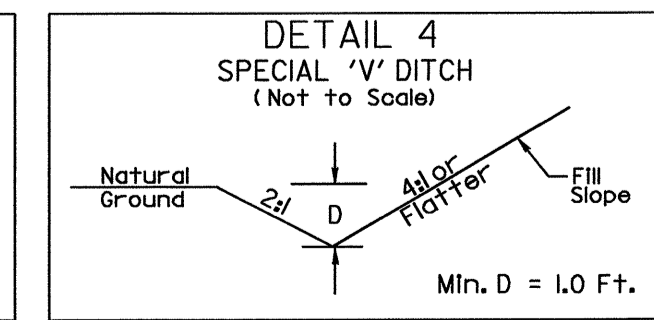
BEGIN TIP PROJECT (B-4124)
-L- POT Sta. 14+00.00



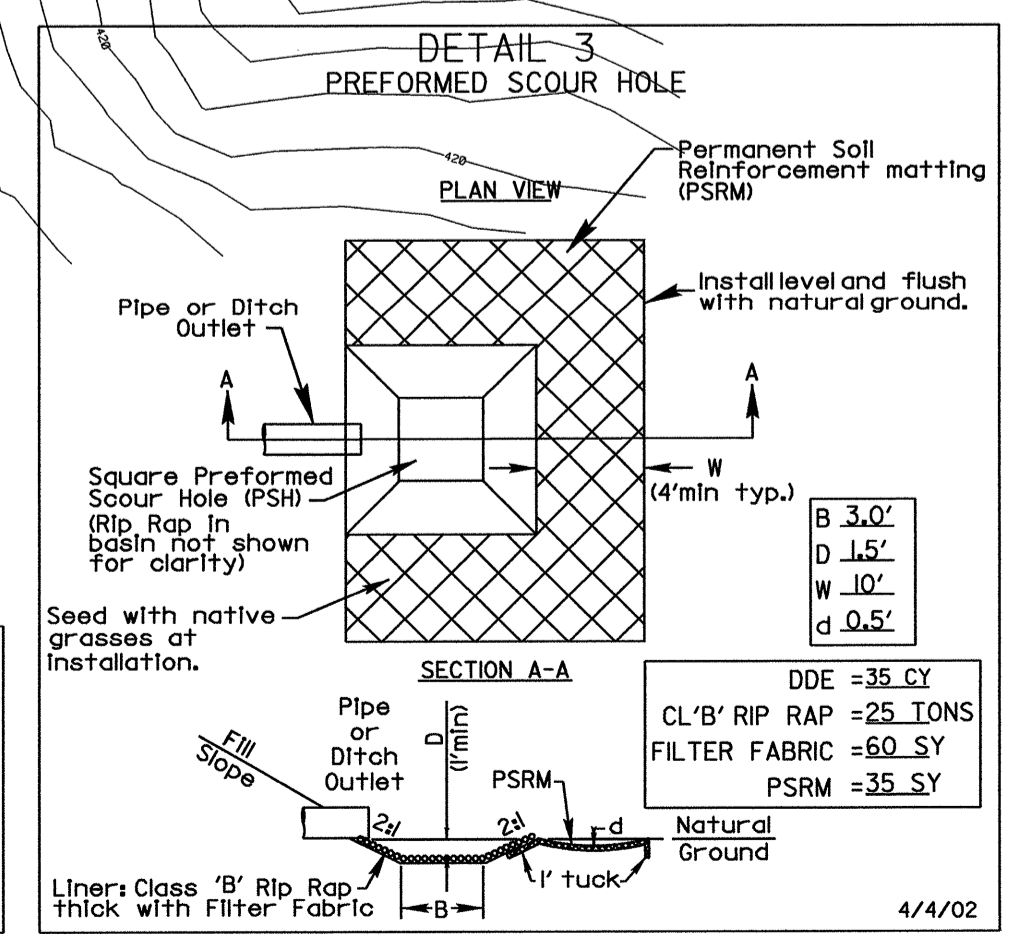
STA. 16+50 LT. TO STA. 18+00 LT.
STA. 21+30 RT. TO STA. 24+50 RT.



STA. 18+00 LT. TO STA. 19+00 LT.



STA. 15+00 LT. TO STA. 16+50 LT.



STA. 19+05 LT.

PROJECT REFERENCE	SHEET NO.
B-4124	EC-5/CONST.5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

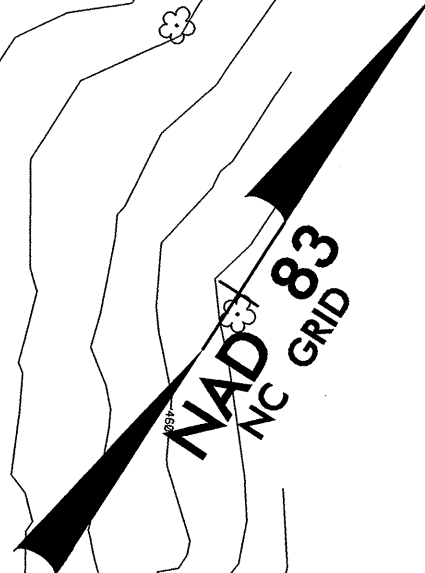
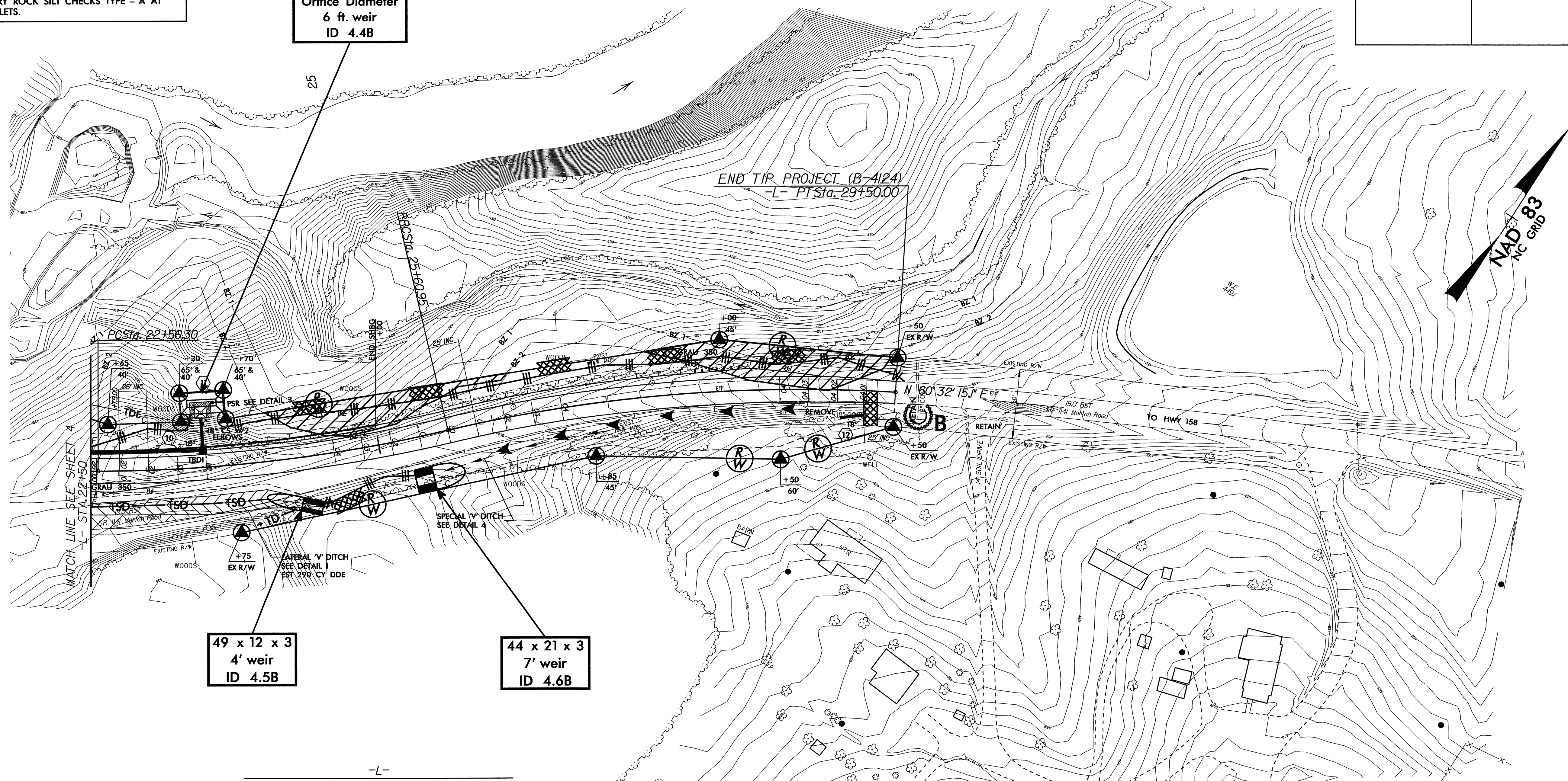
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

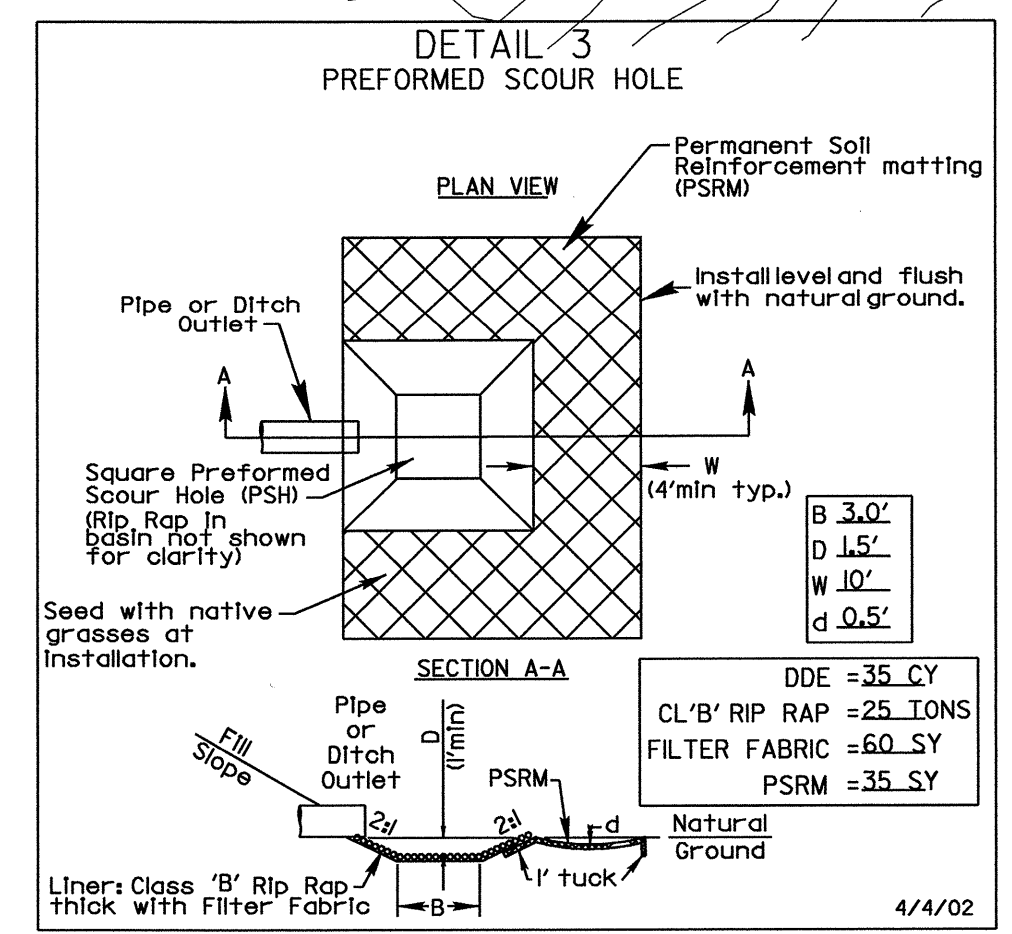
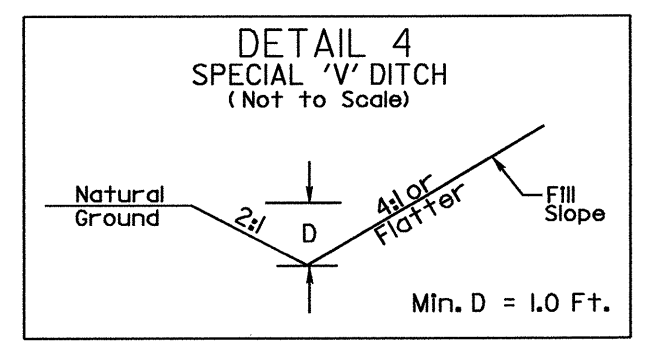
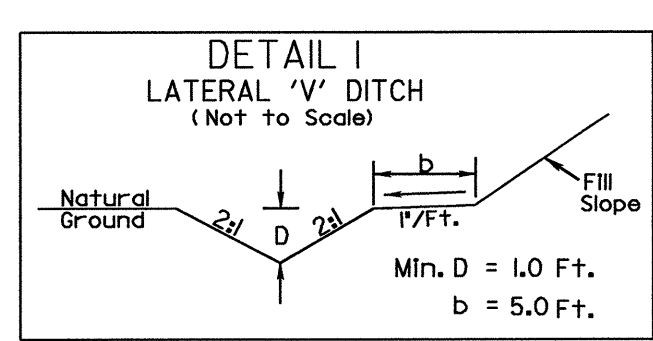
37 x 18 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
6 ft. weir
ID 4.4B

49 x 12 x 3
4' weir
ID 4.5B

44 x 21 x 3
7' weir
ID 4.6B



-L-	
PI Sta 24+09.28	PI Sta 27+56.85
$\Delta = 13^{\circ} 01' 34.2''$ (LT)	$\Delta = 16^{\circ} 38' 06.6''$ (RT)
D = 4' 16' 32.9"	D = 4' 16' 32.9"
L = 304.65'	L = 389.05'
T = 152.98'	T = 195.90'
R = 1,340.00'	R = 1,340.00'
SE = SEE PLAN VIEW	SE = SEE PLAN VIEW

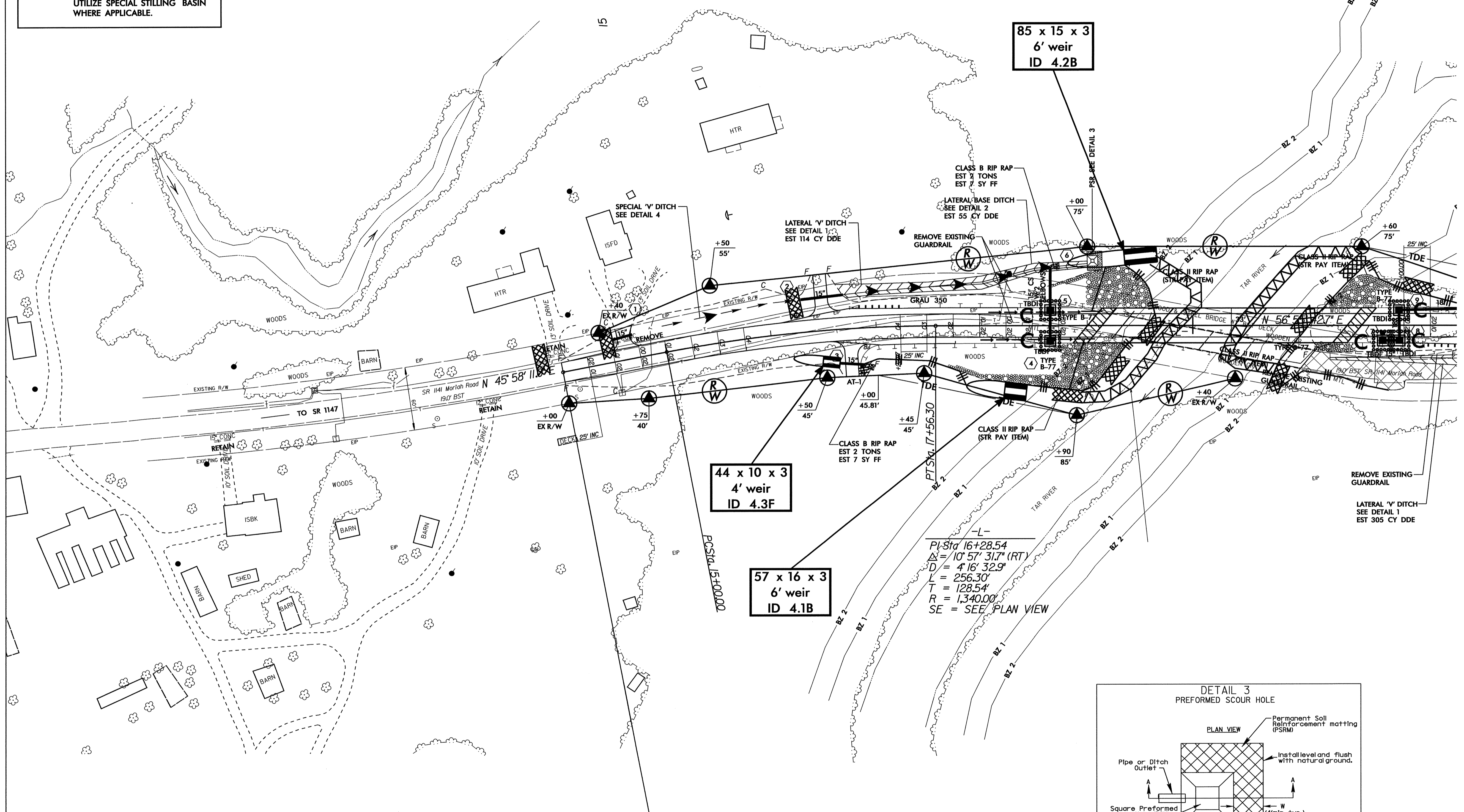


NOTE: SHBG DENOTES SHOULDER BERM GUTTER.

FOR -L- PROFILE SEE SHEET 6

PROJECT REFERENCE	SHEET NO.
B-4124	EC-6/CONST.4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
UTILIZE SPECIAL STILLING BASIN
WHERE APPLICABLE.



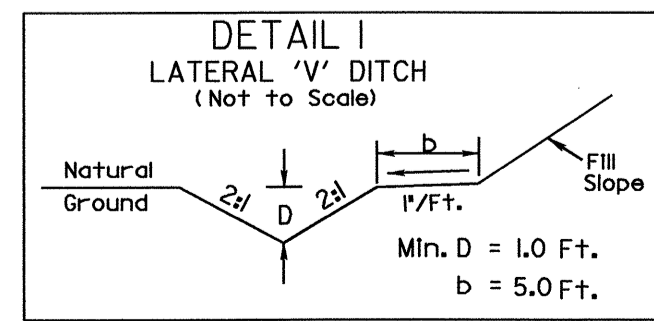
85 x 15 x 3
6' weir
ID 4.2B

44 x 10 x 3
4' weir
ID 4.3F

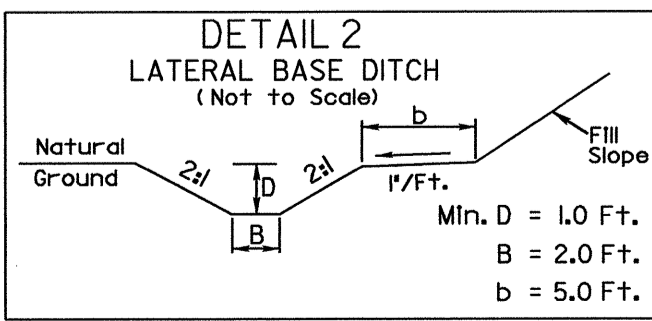
57 x 16 x 3
6' weir
ID 4.1B

-L-
PI-STA 16+28.54
ΔX = 10' 57" 31.7" (RT)
D = 4' 16" 32.9"
L = 256.30'
T = 128.54'
R = 1,340.00'
SE = SEE PLAN VIEW

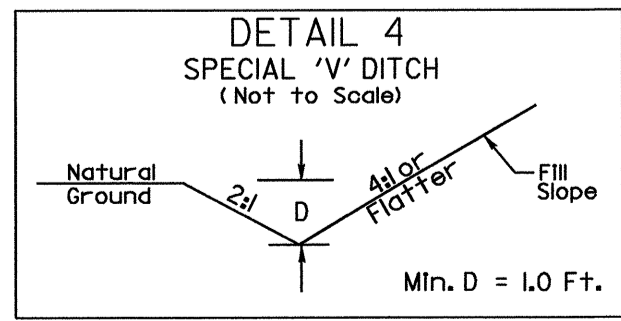
BEGIN TIP PROJECT (B-4124)
-L- POT STA. 14+00.00



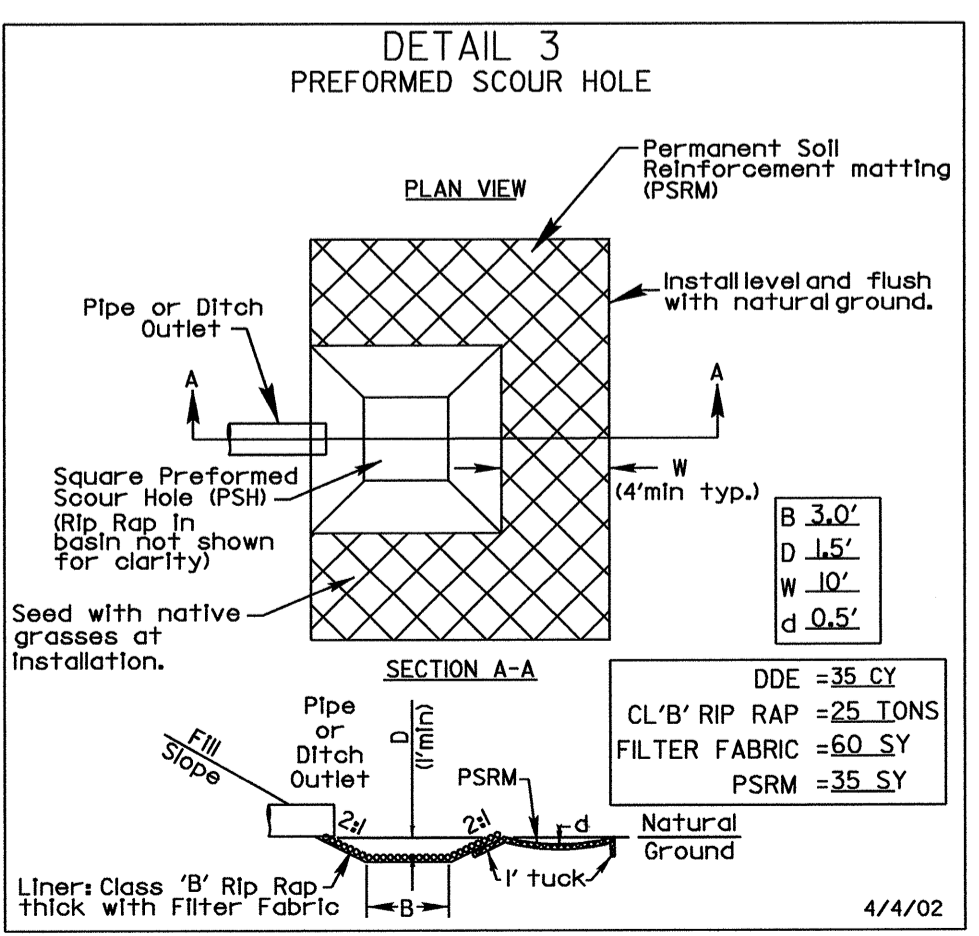
STA. 16+50 LT. TO STA. 18+00 LT.
STA. 21+30 RT. TO STA. 24+50 RT.



STA. 18+00 LT. TO STA. 19+00 LT.

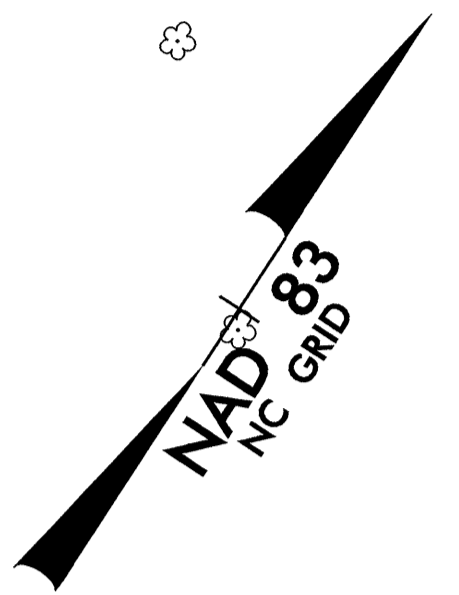
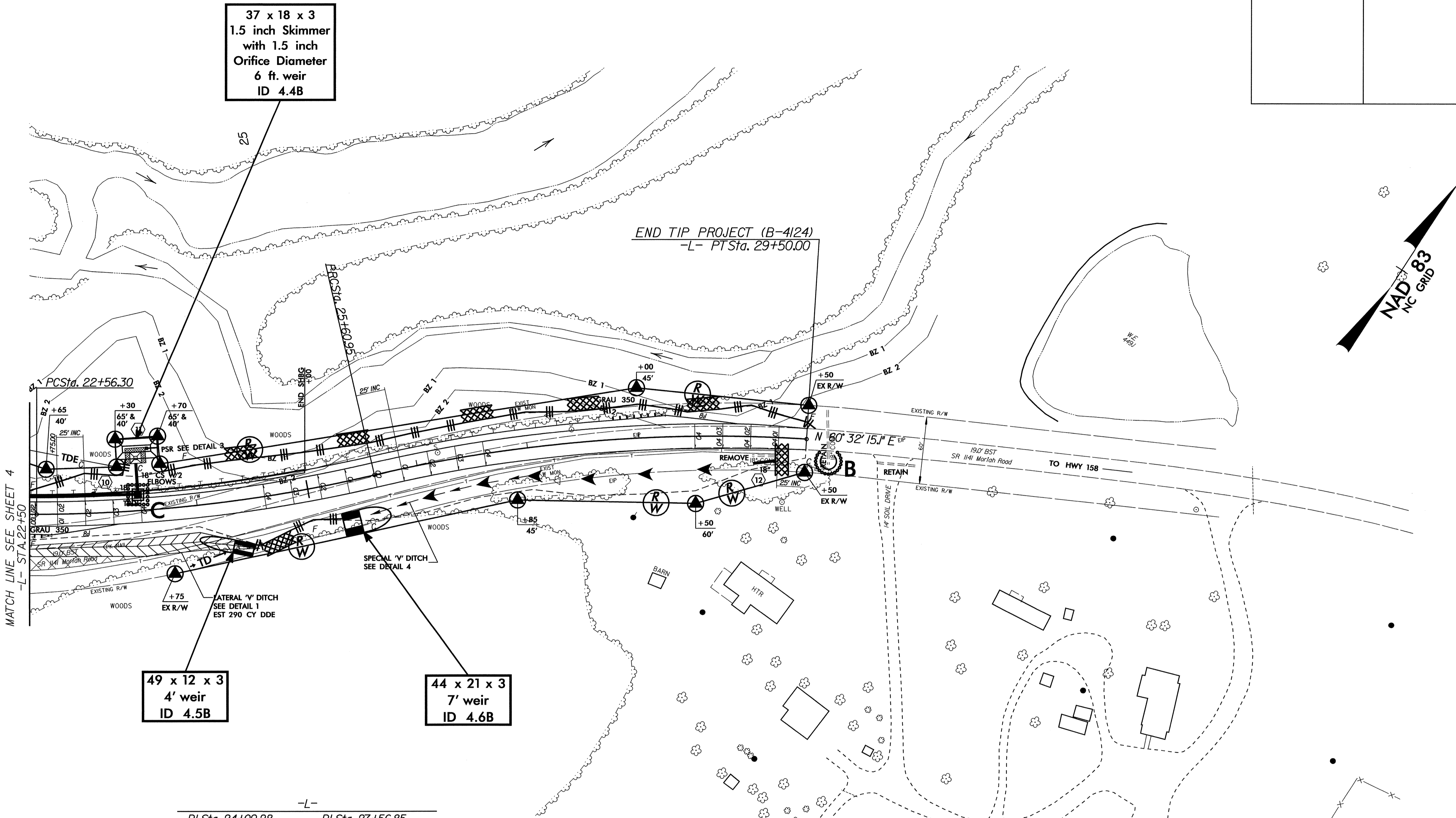


STA. 15+00 LT. TO STA. 16+50 LT.



STA. 19+05 LT.

PROJECT REFERENCE	SHEET NO.
B-4124	EC-7/CONST.5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



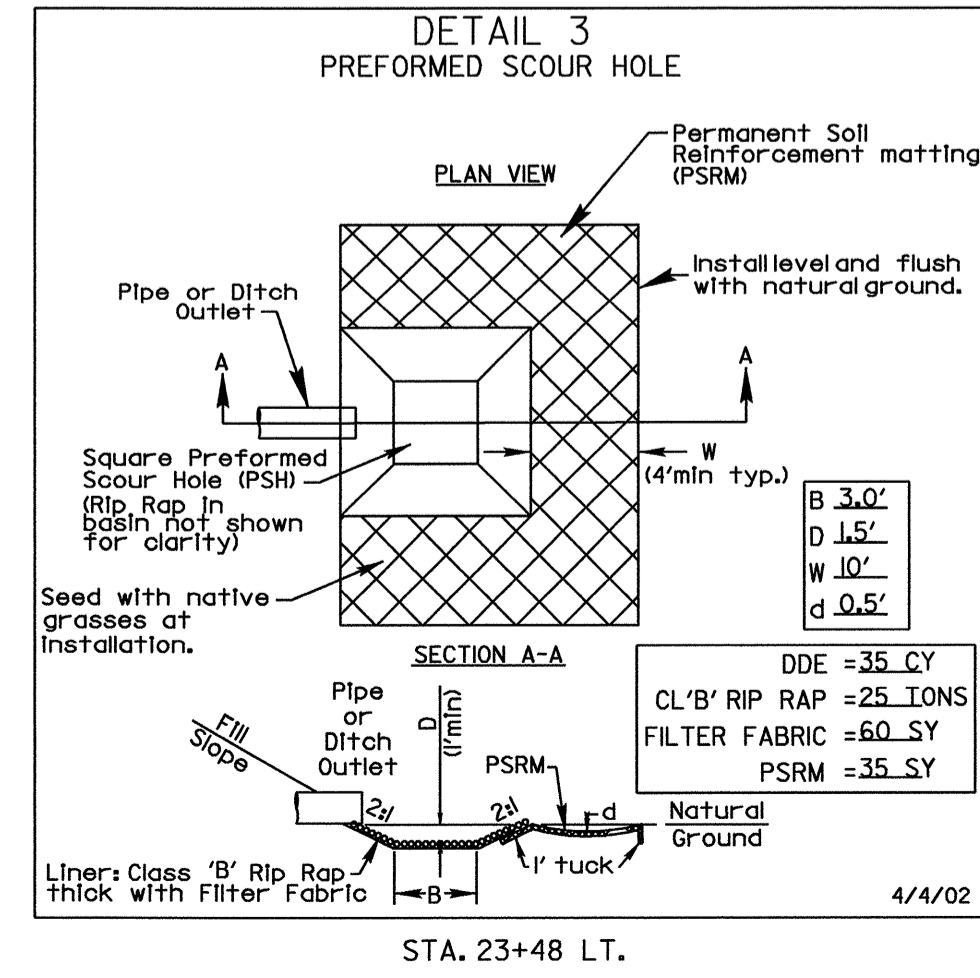
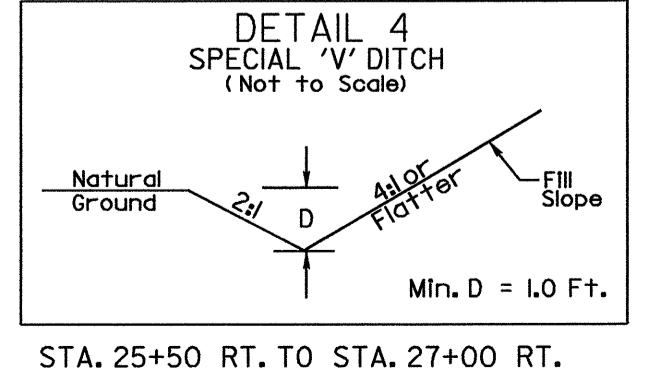
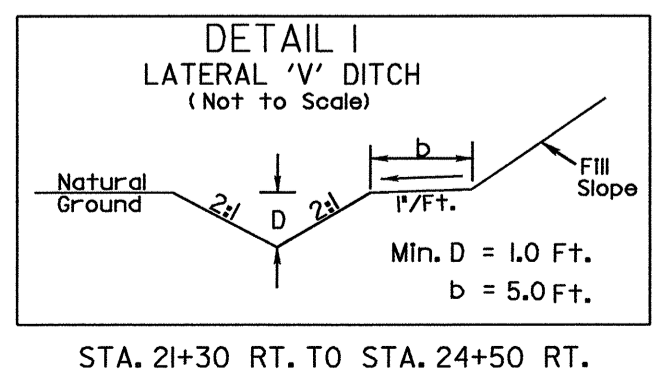
MATCH LINE SEE SHEET 4
-L- STA 22+50

**49 x 12 x 3
4' weir
ID 4.5B**

**44 x 21 x 3
7' weir
ID 4.6B**

-L-

PI Sta 24+09.28	PI Sta 27+56.85
$\Delta = 13^{\circ} 01' 34.2''$ (LT)	$\Delta = 16^{\circ} 38' 06.6''$ (RT)
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NOTE: SHBG DENOTES SHOULDER BERM GUTTER.

FOR -L- PROFILE SEE SHEET 6